

PROJECT DESCRIPTION

I. GENERAL

THIS PROJECT INVOLVES INSTALLING PEDESTRIAN TRAFFIC SIGNAL EQUIPMENT AND HANDICAP RAMPS AT THE INTERSECTION OF US 40 EASTBOUND (WASHINGTON AVE) AT DEVONSHIRE RD IN WASHINGTON COUNTY. US 40 IS ASSUMED TO RUN IN AN EAST/WEST DIRECTION.

II. INTERSECTION OPERATION

THE INTERSECTION CURRENTLY OPERATES IN A NEMA THREE (3) PHASE FIXED-TIMED MODE. EASTBOUND U.S. 40 (WASHINGTON AVE) OPERATES ALONE AND THE DEVONSHIRE RD. APPROACHES OPERATE CONCURRENTLY. A CONCURRENT PEDESTRIAN PHASE IS TO BE ADDED TO PHASE 4.

CURRENTLY PRE-EMPTION PHASE 2 CALLS EASTBOUND US 40. EASTBOUND (WASHINGTON AVE). PRE-EMPTION PHASE PHASE 8 CALLS NORTHBOUND DEVONSHIRE RD. SOUTHBOUND DEVONSHIRE RD. CALLS PHASES 4 AND 7 (THE PROTECTED LEFT ONTO EASTBOUND US 40). NOTE - PHASE 7 IS ONLY USED DURING PRE-EMPTION.

EQUIPMENT LIST

A. EQUIPMENT TO BE SUPPLIED BY THE CITY OF HAGERSTOWN

QUANTITY	UNIT	DESCRIPTION
24	SF	SHEET ALUMINUM SIGN
2	EA	R10-3(1) (9" X 15") GROUND MOUNTED
2	EA	SI-1 (36" X 36") GROUND MOUNTED
2	EA	W16-7P (24" X 12") GROUND MOUNTED

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY CONTRACTOR

QUANTITY	UNIT	DESCRIPTION
1	CY	TEST PIT EXCAVATION
140	EA	ADJUST EXISTING MANHOLE
350	LF	5' YELLOW PREF THERMO PAV'T MARK LINES
45	LF	12" WHITE PREF THERMO PAV'T MARKING LINES
60	LF	24" WHITE PREF THERMO PAV'T MARKING LINES
100	LF	REM EXIST PAV'T MARKING LINES, ANY WIDTH
350	SF	STD TYPE A COMB CURB AND GUTTER 12" X 8"
20	SF	5 INCH CONCRETE SIDEWALK
1	EA	DETECTABLE WARNING SURFACES
2	EA	FURNISH AND INSTALL 2 WIRE CENTRAL CONTROL UNIT
2	EA	FURNISH AND INSTALL AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON STATION AND SIGNS
35	EA	FURNISH AND INSTALL LED 16 INCH COUNTDOWN PEDESTRIAN SIGNAL HEAD
24	EA	FURNISH AND INSTALL 10' PEDESTAL POLE w/BREAKAWAY COUPLINGS (HAGERSTOWN GREEN)
15	EA	WOOD SIGN SUPPORTS 4 INCH X 4 INCH
1	EA	INSTALL SHEET ALUMINUM SIGN
80	EA	4 INCH SCHEDULE 80 RIGID PVC CONDUIT-BORED
125	EA	3 INCH SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED
150	EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
	EA	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
	EA	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)
	EA	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)

CONTACTS

The contact persons for District #6 are as follows:

George H. Small  
Assistant District Engineer - Traffic  
Phone: (301) 729-8444

Gary Shank  
Assistant District Engineer - Maintenance  
Phone: (301) 729-8457

David R. Felker  
Utility Engineer  
Phone: (301) 729-8439

Mr. Richard L. Daff, Sr.  
Chief, Traffic Operations Division  
Phone: (410) 787-7630

Mr. Ed Rodenhizer  
Supervisor, Signal Operations  
Phone: 410-787-7650

Mr. Sonny Bailey  
Supervisor, Sign Shop  
Phone: 410-787-7676

PHASE CHART

1	2	3	4	5	6	7	8
(R)	(R)	(R)	(R)	(R)	(R)	(R)	(R)
(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)
(G)	(G)	(G)	(G)	(G)	(G)	(G)	(G)

PHASE 2	G	G	R	R	R	R	DW	DW	
2 CHANGE	Y	Y	R	R	R	R	DW	DW	
PHASE 4 AND 8	R	R	G	G	G	G	WK	WK	
PED CLEARANCE	R	R	G	G	G	G	FL/DW	FL/DW	
4 AND 8 CHANGE	R	R	Y	Y	Y	Y	DW	DW	
FLASHING OPERATION	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	DARK	DARK	

FIRE HOUSE PRE-EMPTION	G	G	R	R	R	R	DW	DW	
02 FIRE HOUSE PRE-EMPTION	Y	Y	R	R	R	R	DW	DW	
02 FIRE HOUSE PRE-EMPTION CHANGE	Y	Y	R	R	R	R	DW	DW	
04 AND 07 FIRE HOUSE PRE-EMPTION	R	R	R	R	G	G	DW	DW	
04 AND 07 FIRE HOUSE PRE-EMPTION CHANGE	R	R	R	R	Y	Y	DW	DW	
08 FIRE HOUSE PRE-EMPTION	R	R	G	G	R	R	DW	DW	
08 FIRE HOUSE PRE-EMPTION CHANGE	R	R	Y	Y	R	R	DW	DW	

NOTE: PHASE 7 IS ONLY USED DURING PRE-EMPTION.

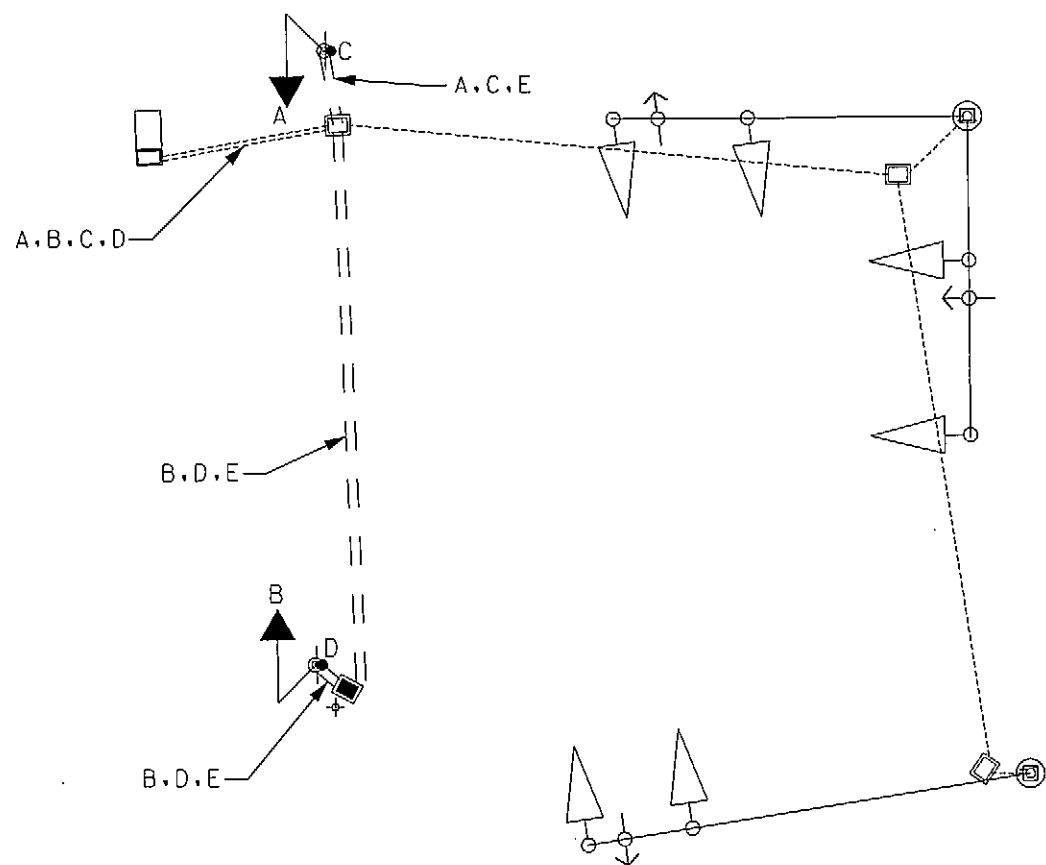
US 40 EAST (WASHINGTON AVE) IS ASSUMED TO RUN IN AN EAST/WEST DIRECTION

WIRING KEY

- A.B } 5 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
- C.D } 2 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
- E } NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
- + GROUND ROD

NOTE: ALL EXISTING WIRES EXCEPT PEDESTRIAN SIGNAL RELATED WIRES WILL STAY.

WIRING DIAGRAM



BW629M84  
US 40 WB/EB@ DEVONSHIRE

SHA

STATE OF MARYLAND  
DEPARTMENT OF TRANSPORTATION  
STATE HIGHWAY ADMINISTRATION  
OFFICE OF TRAFFIC & SAFETY  
TRAFFIC ENGINEERING DESIGN DIVISION

US 40 E/B (WASHINGTON AVE) @ DEVONSHIRE RD  
TRAFFIC SIGNAL MODIFICATION  
HAGERSTOWN, MD

GENERAL INFORMATION PLAN SHEET

SCALE NTS DATE 09/20/09 CONTRACT NO.

DESIGNED BY XMEI OF BRUDIS, INC. COUNTY WASHINGTON  
DRAWN BY XMEI OF BRUDIS, INC. LOGMILE 21E04034.99  
CHECKED BY J.BOLING OF BRUDIS, INC. TMS NO. J851  
F.A.P. NO. STPG-218-1(7)E TOD NO.

TS NO. 3684A DRAWING 3 OF 3 SHEET NO. 3 OF 9

BAI

BRUDIS & ASSOCIATES, INC.  
Consulting Engineers  
9229 Runway Road, Suite 110  
Columbia, Maryland 21045  
Phone 410-884-3607  
www.brudis.com

PLOTTED: Monday, November 23, 2009 AT 11:03 AM  
FILE: p:\08-004 district 1\safety routes to school\hagerstown signal\US 40 E @ Devonshire\Drawings\CADD\Working\pGG-P000\_US40E@DevonshireRd.dgn